

RECEIVED

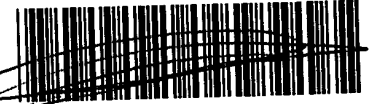
OCT 09 2002

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TECH CENTER 1600/2900

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See pages 6-9



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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/932,076

DATE: 09/13/2002

TIME: 09:15:17

Input Set : D:\SEQLIST 08-10-01.TXT

Output Set: N:\CRF4\09132002\I932076.raw

4 <110> APPLICANT: Escobedo, Jaime
5 Garcia, Pablo Dominguez
6 Sudduth-Klinger, Julie
7 Reinhard, Christoph
8 Randazzo, Filippo
9 Lamson, George
10 Scott, Elizabeth
11 Zhang, Guozhang
12 Kassam, Altaf
13 Pot, David
14 Labat, Ivan
16 <120> TITLE OF INVENTION: Human Genes And Gene Expression Products
19 <130> FILE REFERENCE: 2300-15990
C--> 21 <140> CURRENT APPLICATION NUMBER: US/09/932,076
C--> 21 <141> CURRENT FILING DATE: 2001-08-16
21 <150> PRIOR APPLICATION NUMBER: 60/226,326
22 <151> PRIOR FILING DATE: 2000-08-16
24 <160> NUMBER OF SEQ ID NOS: 6010
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28 <210> SEQ ID NO: 1
29 <211> LENGTH: 611
30 <212> TYPE: DNA
31 <213> ORGANISM: Homo sapiens
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35 aggattggct agctttcagg agagcagaag attaggagga gcctcctagg agatccttga 120
36 cttgatcagg acaaaatcag gttttgccat attaggatag aggggatgag agaaacaaca 180
37 ttgcacatag tttggataat gacgtgggtt tgtaagacaa ctcttcaaac ggtgtaaatg 240
38 acaggagcac aggggccagg ctggtatcag agaggggaac aaggaccagt tcttagatgg 300
39 atttgtgtat catttaagga atttgaattt cacatagatt ggggatccct tgaagggtac 360
40 tcagaaggag ttatattatc aggcagaaac atcactctgg cggcagcatg agggatgggt 420
41 tgaaaaattt aaaacttgaa gcggcaagtc cattcaggcg actactgcaa tagtcttggc 480
42 atgaaatgac acattaaggc aagattgccc agggctttta cattgatatt attttaaaaa 540
43 taaattgcct gtgctagtaa tgcctggtt ctttgcttac tggttgaaga ctcaattttt 600
44 atagataatg c 611
46 <210> SEQ ID NO: 2
47 <211> LENGTH: 273
48 <212> TYPE: DNA
49 <213> ORGANISM: Homo sapiens
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53 ccagataata gcagaatcag aacttcaaat acttggccca ttgctggaaa tattaggact 120
54 agaaaacatc aagatcaggc accgaacagg caaatctcca ctgagtgggt ctgatgtgca 180

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55 aatagctgat gaagactggt tatggttata aaatggaaca cagttttcta attacatagt 240
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66 actgttggtt acttacaag actctctgtg cctcagtttc ttcatctgta aaatagggtt 180
67 aataacacct acctcatggt attctgagga ttcaaagaat taacgtagggt aatgctctta 240
68 gaatgttagc tactgctgtt attatcagta ttggaagtcc agtgtttctt cctgtgggaa 300
69 gacgcagtca aatttttagtg ttgtgaaaga ttctcaggct agctcacaaa agcctgccga 360
70 ctgtatgatg cagcctacct gtaacactgc tggcctcttg actaccogga gcctggtagc 420
71 atgggactgc tgctcacgat gggcagcagc ctggcatggg ggcggtgtct gttggcagct 480
72 agggcgagcc tctgccactt cacctgtgat cctgggcaag ttcttatctt gctttgtgtc 540
73 tccgtctcct cgtttgtaaa gttagagctg agaggattaa ttctgcacat ataaagtact 600
74 tagtgccctg tacagggtaa gtattctgta agtattagct atttgggtct 649
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83 cattttcttc tgtgtgtaaa atagcacaca ttcttattca ccacagctgt aagcttaagg 120
84 ccattcactc actactctgc tgtagtccta tgacactagc tatatcatgg ccaacttact 180
85 gcccacttct tgtttccaga agtcacacac actagagtca gtttcatttc tttgtagtta 240
86 ccctttttgc aactacaggg ctattacaaa gtcacctgag gccactactt taaacagaaa 300
87 catagtacta caaagcccta gaatctaaga cagcccccca atctgagggt catctcagtc 360
88 cttgacactc ctttctttgt taattccaca agaagaagaa attatagagc tggcaccaat 420
89 ggtggcttca gcaccaatag taaagggctg gaggcaattg taaacatcac ctccacaatg 480
90 aaggtaacct tattactcat cacattcaaa gtgcagccct aaagaaaata atcatttctt 540
91 attccttttc ttgtattttt ttcttgcca ctcattttca gctgagttaa gtattctact 600
92 atgtgaaaat gattact 617
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101 gctttcaagt tgagctatgt tagatatatg ctcccctgat ggaagacaga catgtctcca 120
102 gggttttgag ggtcaaatga cagaatgtat ataaagtgtt ttgaacatta taaattgcct 180
103 ccttagaggc aagggaacat caaatttggt tgttttcttg catcagagac ttctagctca 240
104 gatttctttg ttggccattt ttaagggcat ttccaatgag tttttaagtg taatgagttt 300
105 ttaa 304
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108 <211> LENGTH: 574
109 <212> TYPE: DNA
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114 tgggggatgg acagttgaac agatatagtt caagaaactt tccagctgaa cggcataacc 120
115 ccacagtaac tgggcatcag gagcaaactt accttcagaa ggagacttcc actttgcagg 180
116 tggaacagaa tggggactat ggtaggggca ggagaactct cttcagaggt cgaagacgac 240
117 gagaagatga caggatctca agacctcatc cttcaacagc tgaatcaaag gctccaacac 300
118 caaagtttga cttattagcc tcaaattttc cacctttacc tggaagttca tcaagaatgc 360
119 caggtgaact cgttttggag aataggatgt ctgatgttgt taaaggtgtc taaaagaaa 420
120 aggataatga agagttgaca attagttgcc cagtgcctgc agatgagcag acagaatgca 480
121 cttctgcccc gcaactcaat atgagtacca gttctccatg tgctgctgag cttactgcat 540
122 taagcacaac tcagcaagaa aaggatctaa taga 574
124 <210> SEQ ID NO: 7
125 <211> LENGTH: 544
126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
129 <400> SEQUENCE: 7
130 agactgtgca ggggcatcag agctccagag ctatctggag gagctgaagg ggcttggett 60
131 cctgactttt ggacttcaca tccttgagat tggagaaaac agcctgattg tcagtccctga 120
132 gcatgtatgt cagcacttgg agcaggtgct gcttggtacc atagcctttg tggatgtttc 180
133 cagctgccag cgtcaccctt ctgtctgctc cctggaccag cttcaggact tgaaggccct 240
134 cgtggctgag atcatcacac atttgcaggg gctgcagagg gacttatctc tagcagtctc 300
135 ctacagcagg ctccattcct cagactggaa tctgtgtact gtatttggga tcctcctggg 360
136 ctatcctggt ccctatacct ttcacctgaa ccagggagat gacaactgct tagctctgac 420
137 tccactacga gtattcactg cccggatctc atggttgcta ggtcaacccc caatcctgct 480
138 ctattctttt agtgtcccag agagtttggt cccaggcctg agggacattc taaacacctg 540
139 ggag
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 536
143 <212> TYPE: DNA
144 <213> ORGANISM: Homo sapiens
146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature
148 <222> LOCATION: 430
149 <223> OTHER INFORMATION: n = A,T,C or G
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152 aattcgctat aacagcaata ggaatctaata acatatagaa accagttcac aaactacact 60
153 actgagagtt cagagtttta gaactcactt gttctggtga ctatagaagc atcctgcac 120
154 tgctgccact ccaatggata tcaatgttcc cagacagctg ggtctattcc ctcatctgca 180
155 agtgcactct ccaagccttc ctgcccctct gcacgaatgc ttttactggt cccttcttgt 240
156 gaaatgacct cttgttattc tgttcagatt cctttccagc cagcaggttc acttgtttct 300
157 ataggtgcac gattgtctct ttgttctgta ttacagtcac ttggctgaga gaagtcacct 360
158 atcttggtt agttgtagaa aactacatac tctcttgta gcaaataatt tccatgtaag 420
W--> 159 tgagtccan atctaagtat ggccaagagt tgagacgaga aagttcaatt tcaactcaat 480
160 aaacacttgg tgaatagcag ctatcttcat ggcagggaga ttattgaaag aagaat 536
162 <210> SEQ ID NO: 9
163 <211> LENGTH: 526
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 9

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168 cgaattcggc acgaggagga gcccgcggcg gaggtgagg ctctggccgc agcccgggag 60
169 cggagcagcc gcttcttgag cggcctggag ctggtgaagc aggggtgccg ggcgcgcgtg 120
170 ttccgtggcc gcttccaggg ccgcgcggcg gtgatcaagc accgcttccc caagggttac 180
171 cggcaccggc cgctggaggc gcggttggc agacggcga cgggtgcagga ggcccgggag 240
172 ctccctccgt gtcgcgcgc tggatatct gcccagttg tcttttttgt ggactatgct 300
173 tccaactgct tatatatgga agaaattgaa ggctcagtga ctgttcgaga ttatattcag 360
174 tccactatgg agaactgaaa aactccccag ggtctctcca acttagccaa gacaattggg 420
175 cagggttttg ctcgaatgca cgatgaagac ctcatctcat gtgatctcac cacctccaac 480
176 atgctcctga aacccccctt ggaacagctg aacattgtgc tcatag 526
178 <210> SEQ ID NO: 10
179 <211> LENGTH: 594
180 <212> TYPE: DNA
181 <213> ORGANISM: Homo sapiens
183 <400> SEQUENCE: 10
184 cgaattcggc acgagcaagg tctatgacta ctacctacca gatgaacagg caacaattca 60
185 gtattctgat cctgtgaat gaggatagga gctggaaact caattagtcc tctgtgacat 120
186 tactggaggg tggaacattc ttctgtcgct tgaagcagaa ctcatccaat caaataattt 180
187 aatttctctg actagtatat gggtaacaaa tgaatatgtc tgaacctcag ctataatact 240
188 ttctactacc ttgcaagga gatgggatag gaacaatcac tcagaggagg cgttgcatgg 300
189 acaggggtcat agggggaaga aagggtggtt agctgtttta tttagccatt caaggggctt 360
190 ctcaaaagag gagacgggtg tagaggggtga actagagaag ataagaatgt ctctcaggc 420
191 cggatgcggt ggctcacgcc tgtaatccca gcactttggg attgcgaggt gggcggatca 480
192 cttgaggtca ggagttcaag accagcctgg ccaacatggt aaaaccgctc tctactaaca 540
193 atacaaagat tagcctggtg tggtaggcag ggcctgtaat cgcagcccct tgga 594
195 <210> SEQ ID NO: 11
196 <211> LENGTH: 588
197 <212> TYPE: DNA
198 <213> ORGANISM: Homo sapiens
200 <220> FEATURE:
201 <221> NAME/KEY: misc_feature
202 <222> LOCATION: 241
203 <223> OTHER INFORMATION: n = A,T,C or G
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207 gtttctctgc aagagtgaac tgatctagta agaattgcaa aattgttact atattgttac 120
208 ccttgcctct cgttttagag ggcaggtgct tccgtgtgta catagaagca gagcttggtg 180
209 gagaagagga gctaaaaagg aattagatta gaatccacct ctgtacaatg gcaccatctg 240
W--> 210 ngctcccaaa agctcattgt taaactttcg agaattttga gagccagttg taaaacacag 300
211 ccattataaa aactaaatca tataaactta caattaaaca cattatatga agagccaaga 360
212 taataaatac tcaaaactct tcctaattat tttgctatgt ttcactatta tctattctct 420
213 tgaggttagt tacatctatt gtggctatat ggtggaaata ctgtataaaa tgctgtgcaa 480
214 ctgagcttct cctcccaatt ctccattcag tgatgtcata ttcagaactt gaaattgacc 540
215 atgatggaag taattacacc acagaaatca gcccatgcta caaagcag 588
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218 <211> LENGTH: 388
219 <212> TYPE: DNA
220 <213> ORGANISM: Homo sapiens
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224 aatcgcgagc agagcaggag aagactttta acagaatggc cttgtgtcct tttcctttac 120
225 taagtgtttt gaataagaa aaaaaaatg tatgacctca gagaatgaat acccttcagg 180
226 aagccacttc ctgatttttag gggataatat tgttctctgt agcacaaaga tttaaagtcc 240
227 tagaatttct aatcctagtt ctcagaattg tagaatatga caaaaataat ggtttcccca 300
228 tttgtccact gacttcaggg atatttcaca agttatttat ttatagaatg aaaactatgt 360
229 agttaaatct gtcattcagt taaacctg                                     388
231 <210> SEQ ID NO: 13
232 <211> LENGTH: 613
233 <212> TYPE: DNA
234 <213> ORGANISM: Homo sapiens
236 <400> SEQUENCE: 13
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238 caagataaga aataaagaca gcaagactgc aaaaagtcta ttatgtagac ttgcaaaaag 120
239 tctacataat aatataaatt caagccaagt agaagtgatt ttgcaagtct gtgtatgatt 180
240 aattggctag tgaaatatat ggataaaatt agttgtagga attaaagcat ctgaagtgat 240
241 ctcttgaggc tctggtggca aagcagaaa ggggaatttga atttgaacta ggtttaaaaag 300
242 tgtgagtagt agccctttct tttggcaggg gaggtgatcc taccattct ccttagagcc 360
243 tgtgcaattg gtctcagtgt ttctcaacat ctaagaatga agctgcattc ttaatgcttt 420
244 agtagctgtg cttcaaaacg gcaagtttcc ttttgagagt gattttctct ttgttctagc 480
245 ttgtttcact aggcggataa gcgtgggcag taaactggga ggtgtccctt tatcagcacc 540
246 tctcagcttc acccaccctg ctgcttgccc tgggcagtag cctggtcaca tctttgaaaa 600
247 cctctgttta gtc                                     613
249 <210> SEQ ID NO: 14
250 <211> LENGTH: 578
251 <212> TYPE: DNA
252 <213> ORGANISM: Homo sapiens
254 <400> SEQUENCE: 14
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256 tgaagagaga tgacctgag gctccagtct actttaaaaa tatgtaagtc tctgataggt 120
257 catgatttta gaccacatac agactgtcct atggggaaa cacagggag aaaagcagca 180
258 taaacatttt tatcctttat tgtgtttgtc caaagcagag ttaagagggt agcctaagag 240
259 tataatactt gcctttccaa ctacagaata atcttttctt ttctccaaat tgtataaagt 300
260 agattttttt ttttcagtga gtgaaacgat gaaacttaga ctcaactaaa tgtatttctc 360
261 aatgtaagaa tgtgtgtgtg ccaagtaaat ttactaagca ttagaacatg gaaagcagag 420
262 tatgattaat accctcgttt acctcacttt ttccccatt ttcaaaattt gttttcaaat 480
263 atggaaattc ttctgtacac taaaatgac ttaggaaaca ggtagctcat ggtctaaagt 540
264 ttagcagttc atgattaagg gttgccgcaa tctaactt                                     578
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267 <211> LENGTH: 612
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 15
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273 gatgaaactc ctatgtttga cccaagtcta ctcaaagaag tggactggag tcagaatata 120
274 gctacatttt ctccagccat ttccccaaca catcctggag aaggcttggg tttgaggcct 180
275 ctttgtactg ctgacttaaa tagaggtttt ttttaaggat tgggtcagct aacagagact 240
276 ggagttgtca gccctgaaca atttatgaaa tcttttgagc atatgaagaa atctggggat 300
277 tattatgtta cagttgtaga agatgtgact ctaggacaga ttgttgctac ggcaactctg 360
278 attatagaac ataaattcat ccattcctgt gctaagagag gaagagtaga agatgttgtt 420

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; N Pos. 430
Seq#:11; N Pos. 241
Seq#:39; N Pos. 495
Seq#:41; N Pos. 136
Seq#:43; N Pos. 510
Seq#:54; N Pos. 583
Seq#:57; N Pos. 504
Seq#:60; N Pos. 482
Seq#:106; N Pos. 290,291
Seq#:111; N Pos. 397
Seq#:147; N Pos. 335
Seq#:159; N Pos. 148
Seq#:160; N Pos. 365
Seq#:195; N Pos. 93
Seq#:201; N Pos. 91,92
Seq#:347; N Pos. 161
Seq#:449; N Pos. 432
Seq#:486; N Pos. 1
Seq#:594; N Pos. 477
Seq#:597; N Pos. 89
Seq#:605; N Pos. 427
Seq#:615; N Pos. 350
Seq#:626; N Pos. 319,375
Seq#:698; N Pos. 154,155
Seq#:744; N Pos. 182
Seq#:839; N Pos. 88
Seq#:854; N Pos. 239,240
Seq#:881; N Pos. 471
Seq#:963; N Pos. 234
Seq#:1152; N Pos. 455
Seq#:1155; N Pos. 520
Seq#:1179; N Pos. 204
Seq#:1198; N Pos. 195
Seq#:1217; N Pos. 34,35
Seq#:1224; N Pos. 397
Seq#:1298; N Pos. 335
Seq#:1366; N Pos. 38,341
Seq#:1375; N Pos. 560
Seq#:1381; N Pos. 398
Seq#:1383; N Pos. 291
Seq#:1410; N Pos. 502
Seq#:1411; N Pos. 94,95
Seq#:1476; N Pos. 254
Seq#:1484; N Pos. 406

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Seq#:1541; N Pos. 295
Seq#:1639; N Pos. 335
Seq#:1688; N Pos. 394,395
Seq#:1714; N Pos. 385
Seq#:1715; N Pos. 103
Seq#:1753; N Pos. 361
Seq#:1754; N Pos. 363
Seq#:1814; N Pos. 342
Seq#:1880; N Pos. 433,438
Seq#:1883; N Pos. 147
Seq#:1904; N Pos. 358
Seq#:1963; N Pos. 1,2,4
Seq#:2068; N Pos. 312
Seq#:2097; N Pos. 8
Seq#:2154; N Pos. 192,193,194
Seq#:2221; N Pos. 273
Seq#:2226; N Pos. 254
Seq#:2232; N Pos. 417
Seq#:2251; N Pos. 394,395
Seq#:2253; N Pos. 260
Seq#:2286; N Pos. 559
Seq#:2291; N Pos. 586
Seq#:2350; N Pos. 543
Seq#:2358; N Pos. 358
Seq#:2425; N Pos. 318
Seq#:2432; N Pos. 106
Seq#:2465; N Pos. 252
Seq#:2469; N Pos. 234
Seq#:2481; N Pos. 504
Seq#:2535; N Pos. 273
Seq#:2550; N Pos. 96
Seq#:2568; N Pos. 510,511
Seq#:2576; N Pos. 423
Seq#:2577; N Pos. 416
Seq#:2592; N Pos. 455
Seq#:2594; N Pos. 165
Seq#:2647; N Pos. 156
Seq#:2690; N Pos. 577,578
Seq#:2717; N Pos. 258
Seq#:2722; N Pos. 300
Seq#:2727; N Pos. 305
Seq#:2728; N Pos. 234
Seq#:2729; N Pos. 333,367
Seq#:2736; N Pos. 291
Seq#:2741; N Pos. 432,433
Seq#:2801; N Pos. 104
Seq#:2893; N Pos. 255
Seq#:3071; N Pos. 216
Seq#:3094; N Pos. 383

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Seq#:3175; N Pos. 334,335
Seq#:3177; N Pos. 396,397
Seq#:3267; N Pos. 302
Seq#:3272; N Pos. 291
Seq#:3391; N Pos. 25
Seq#:3397; N Pos. 485
Seq#:3405; N Pos. 473
Seq#:3419; N Pos. 390,391
Seq#:3437; N Pos. 236
Seq#:3449; N Pos. 403,447
Seq#:3459; N Pos. 166
Seq#:3490; N Pos. 158
Seq#:3508; N Pos. 284
Seq#:3525; N Pos. 276
Seq#:3549; N Pos. 370
Seq#:3612; N Pos. 85
Seq#:3615; N Pos. 158
Seq#:3639; N Pos. 141
Seq#:3649; N Pos. 574
Seq#:3721; N Pos. 210,211
Seq#:3795; N Pos. 179,180
Seq#:3887; N Pos. 316
Seq#:3893; N Pos. 282
Seq#:3912; N Pos. 276,277
Seq#:3986; N Pos. 455
Seq#:4063; N Pos. 383
Seq#:4108; N Pos. 276
Seq#:4187; N Pos. 1
Seq#:4289; N Pos. 216
Seq#:4401; N Pos. 94,95
Seq#:4514; N Pos. 1,2
Seq#:4520; N Pos. 155
Seq#:4667; N Pos. 154,155
Seq#:4727; N Pos. 375
Seq#:4771; N Pos. 437
Seq#:4798; N Pos. 96
Seq#:4873; N Pos. 276
Seq#:5004; N Pos. 427
Seq#:5015; N Pos. 449
Seq#:5065; N Pos. 156
Seq#:5067; N Pos. 216,217
Seq#:5069; N Pos. 55
Seq#:5174; N Pos. 487
Seq#:5209; N Pos. 438
Seq#:5226; N Pos. 181,182
Seq#:5227; N Pos. 470
Seq#:5228; N Pos. 420
Seq#:5241; N Pos. 143

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/932,076

DATE: 09/13/2002
TIME: 09:15:18

Input Set : D:\SEQLIST 08-10-01.TXT
Output Set: N:\CRF4\09132002\I932076.raw

Seq#:5326; N Pos. 507
Seq#:5368; N Pos. 510
Seq#:5435; N Pos. 483
Seq#:5440; N Pos. 416
Seq#:5450; N Pos. 558
Seq#:5464; N Pos. 1,2
Seq#:5481; N Pos. 508
Seq#:5487; N Pos. 341
Seq#:5499; N Pos. 475
Seq#:5527; N Pos. 368
Seq#:5585; N Pos. 156,157
Seq#:5601; N Pos. 1
Seq#:5624; N Pos. 538
Seq#:5653; N Pos. 449
Seq#:5658; N Pos. 524
Seq#:5672; N Pos. 499
Seq#:5696; N Pos. 7,8
Seq#:5708; N Pos. 454
Seq#:5831; N Pos. 90
Seq#:5844; N Pos. 202,212
Seq#:5998; N Pos. 96,97

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/932,076

DATE: 09/13/2002

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Input Set : D:\SEQLIST 08-10-01.TXT

Output Set: N:\CRF4\09132002\I932076.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application No
L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:420
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:240
L:695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:480
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:120
L:776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:480
L:973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:540
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:480
L:1094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:480
L:1892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:240
L:1984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:360
L:2590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:147 after pos.:300
L:2774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:120
L:2798 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:160 after pos.:360
L:3303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:195 after pos.:60
L:3395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:201 after pos.:60
L:5740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:347 after pos.:120
L:7327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:449 after pos.:420
L:7853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:486 after pos.:0
L:9562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:594 after pos.:420
L:9612 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:597 after pos.:60
L:9754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:605 after pos.:420
L:9909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:615 after pos.:300
L:10091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:626 after pos.:300
L:10092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:626 after pos.:360
L:11277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:698 after pos.:120
L:11984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:744 after pos.:180
L:13383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:839 after pos.:60
L:13602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:854 after pos.:180
L:14004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:881 after pos.:420
L:15248 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:963 after pos.:180
L:18331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1152 after pos.:420
L:18388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1155 after pos.:480
L:18767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1179 after pos.:180
L:19071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1198 after pos.:180
L:19399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1217 after pos.:0
L:19530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1224 after pos.:360
L:20732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1298 after pos.:300
L:21826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1366 after pos.:0
L:21831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1366 after pos.:300
L:21974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1375 after pos.:540
L:22074 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1381 after pos.:360
L:22111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1383 after pos.:240
L:22515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1410 after pos.:480
L:22531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1411 after pos.:60
L:23523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1476 after pos.:240
L:23650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1484 after pos.:360

VERIFICATION SUMMARY

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L:24536 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1541 after pos.:240
 L:26050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1639 after pos.:300
 L:26856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1688 after pos.:360
 L:27263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1714 after pos.:360